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January 26, 2015

**BY ELECTRONIC MAIL**

Serrin Turner  
Timothy T. Howard  
Assistant United States Attorneys  
Southern District of New York  
One St. Andrew's Plaza  
New York, New York 10007

Re: *United States v. Ross Ulbricht*  
14 Cr. 68 (KBF)

Dear Mr. Turner and Mr. Howard:

This letter is submitted on behalf of Ross Ulbricht, providing formal notice, pursuant to Rule 16(b)(1)(C), Fed.R.Crim.P., that the defense plans to call Andreas M. Antonopoulos to provide expert opinion testimony on the following subjects:

1. the origins of Bitcoin;
2. the various purposes and uses of Bitcoin;
3. the mechanics of Bitcoin transactions, including explanation of Bitcoin wallets, accounts, exchanges, and the blockchain;
4. the ability to track transactions and participants in Bitcoin transactions;
5. the value of Bitcoin over time since its inception, and the cause of various increases and decreases in the value of Bitcoin at certain points in time;
6. the concepts of Bitcoin speculating and Bitcoin mining;

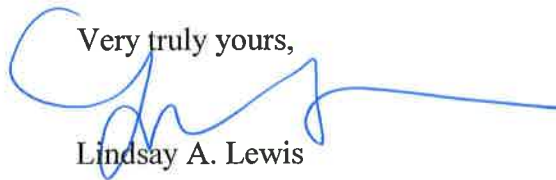
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7. the ability to tie Bitcoins from Silk Road to Mr. Ulbricht; and
8. the dollar value of Bitcoins generated through transactions on Silk Road, at various points in time, including at the time of Mr. Ulbricht's arrest.

In addition, Mr. Antonopoulos's Curriculum Vitae is attached hereto.

Very truly yours,



Lindsay A. Lewis

LAL/  
Encl.

## ***CURRICULUM VITAE***

**Andreas Antonopoulos**

andreas@antonopoulos.com

### **EDUCATION**

- 1991-1994 B.Sc. (Hons.) Computer Science. University College London, London, UK.  
Project in distributed collaborative computing, X-Windows screen-sharing protocol.
- 1994-1995 M.Sc. Data Communications Networks & Distributed Systems (DCNDS).  
University College London, London, UK. M.Sc.  
Project in cross-platform distributed data exchange framework as part of the EU (HANSA ESPRIT) funded project.

### **EMPLOYMENT HISTORY**

- 2011 – to date RootEleven / Andreas M. Antonopoulos LLC  
Founder  
  
Consulting, advisory services in crypto-currencies for startup companies.
- 2003 – 2011 Nemertes Research, NY/CA  
Partner, CIO, Lead Security Analyst  
  
Developed and managed research projects, conducts strategic seminars and advised key clients as the lead analyst in Information Security, Data Center and Cloud Computing. CIO for the firm, managing a diverse cloud infrastructure supporting distributed team. Responsible for HR and legal management. Founding partner and managing director
- 2002-2003 ThruPoint Inc, NY  
Director Security Practice  
  
Directed a team of 70-80 network security, information security and penetration testing engineers, ensuring consistent delivery of consulting and professional services across a global delivery team. Support sales efforts as team lead and promoted standardization of deliverables. Worked on accurately predicting and accounting for work effort, profit margin and project management in sales proposals.
- 2001 - 2002 Greenwich Technology Partners, NY  
Security Practice Lead

I led the North East security practice, covering NY, NJ and CT, supporting sales operations (SME), delivering security advice and services and leading projects, including architecting global secure financial transaction network for SWIFT.

2000 - 2001	Managed Business Network, London, Great Britain, Founder / Consulting and Integration Services
1997-2000	Phaia Limited, London, UK Managing Director / Co-Founder
1997-2000	Learning Tree International, London, UK Instructor - Security, Networking
1995-1997	University College of London, Computer Science Department, London, UK, Research Fellow, ESPRIT-funded interactive media project. External Lecturer Lead Research Fellow, "Distributed Application Generation", EPSRC-funded project.
1995-1997	Athena Systems Design Limited, London, Great Britain, Consultant
1993-1995	Odey Asset Management, London, Great Britain IT Manager
1991-1993	IT Consulting
1990-1991	IBM Greece Network Support
1989-1991	Athens Greece Programming BASIC - Private Lessons

#### **TEACHING/RESEARCH**

1992-1994	University College London - Computer Lab Assistant
1994-1995	University College London - Teaching Assistant "Internet and E-Commerce"
1995-1997	University College London - Research Fellow "Distributed Systems Lab"
2014-to date	University of Nicosia - Teaching Fellow "M.Sc. Digital Currencies"

#### **PUBLICATIONS**

Peer-Reviewed - Framework for Distributed Application Generation, SPEEDUP Volume 11, Number 1, pp.15-17, Scientific Journal, (Jun. 1, 1997)

More than 200 published articles and reports on Security, Data Centers, Cloud Computing and Cryptographic Currencies

**PATENTS**

System and Method for Securing Virtualized Networks

United States 61/720,343

System and Method for Dynamic Management of Network Device Data

United States 9479P001